

ABSTRACT OF THE DISCLOSURE

A wireless communication apparatus, a wireless communication method thereof, and a wireless communication system employing the same. A master device of the wireless communication system requests one slave device of a network to perform a function of a master device for a predetermined time, and sends Piconet information about other slave devices of the network, while the one slave device receives the Piconet information from the master device and communicates with the other slave devices of the network for a predetermined time as a temporary master device. Accordingly, the one slave device becomes a dynamic master device and communicates with the other slave devices by using a frequency hopping sequence and a clock of a previous master device as they are, there is no need to transmit the frequency hopping sequence and the clock of the new master device to the slave devices, and accordingly, much time can be saved.